

IN THE CLAIMS

Please amend Claims 25, 26, 27, 28, 29, 31, and 32 as follows.

Please add the following new Claims 44 and 45.

For the Examiner's convenience, all pending claims are listed below. Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

23. An isolated polypeptide selected from the group consisting of:
- a) a polypeptide comprising an amino acid sequence selected from the group consisting of SEQ ID NO:1-37,
 - b) a polypeptide comprising a naturally occurring amino acid sequence at least 90% identical to an amino acid sequence selected from the group consisting of SEQ ID NO:1-37,
 - c) a biologically active fragment of a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NO:1-37, and
 - d) an immunogenic fragment of a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NO:1-37.
24. An isolated polypeptide of claim 23 comprising an amino acid sequence selected from the group consisting of SEQ ID NO:1-37.
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- C38* 25. (Twice Amended) An isolated polynucleotide encoding a polypeptide selected from the group consisting of:
- a) a polypeptide comprising the amino acid sequence of SEQ ID NO:37,
 - b) a polypeptide comprising a naturally occurring amino acid sequence at least 95% identical to the amino acid sequence of SEQ ID NO:37, and
 - c) an immunogenic fragment of a polypeptide having the amino acid sequence of SEQ ID NO:37.
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C38
conclude

26. (Twice Amended) An isolated polynucleotide encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:37.

C39

27. (Once Amended) An isolated polynucleotide of claim 26 comprising the polynucleotide sequence of SEQ ID NO:74.

28. (Once Amended) An isolated recombinant polynucleotide comprising a promoter sequence operably linked to a polynucleotide of claim 25.

29. (Once Amended) An isolated cell transformed with a recombinant polynucleotide of claim 28.

30. (As Once Amended) A method of producing a polypeptide encoded by a polynucleotide of claim 25, the method comprising:

- a) culturing a cell under conditions suitable for expression of the polypeptide, wherein said cell is transformed with a recombinant polynucleotide, and said recombinant polynucleotide comprises a promoter sequence operably linked to a polynucleotide of claim 25, and
 - b) recovering the polypeptide so expressed.
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31. (Once Amended) A method of claim 30, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:37.

C41

32. (Twice Amended) An isolated polynucleotide selected from the group consisting of:

- a) a polynucleotide comprising the polynucleotide sequence of SEQ ID NO:74 ,
- b) a polynucleotide comprising a naturally occurring polynucleotide sequence at least 95% identical to the polynucleotide sequence of SEQ ID NO:74,
- c) a polynucleotide completely complementary to the polynucleotide of a) over the entire length of the polynucleotide of a), and

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- d) a polynucleotide completely complementary to the polynucleotide of b) over the entire length of the polynucleotide of b).
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33. An isolated polynucleotide comprising at least 60 contiguous nucleotides of a polynucleotide of claim 32.

34. A method of detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 32, the method comprising:

- a) hybridizing the sample with a probe comprising at least 20 contiguous nucleotides comprising a sequence complementary to said target polynucleotide in the sample, and which probe specifically hybridizes to said target polynucleotide, under conditions whereby a hybridization complex is formed between said probe and said target polynucleotide or fragments thereof, and
- b) detecting the presence or absence of said hybridization complex, and, optionally, if present, the amount thereof.

35. A method of claim 34, wherein the probe comprises at least 60 contiguous nucleotides.

36. A method of detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 32, the method comprising:

- a) amplifying said target polynucleotide or fragment thereof using polymerase chain reaction amplification, and
- b) detecting the presence or absence of said amplified target polynucleotide or fragment thereof, and, optionally, if present, the amount thereof.

37. A method of screening a compound for effectiveness in altering expression of a target polynucleotide, wherein said target polynucleotide comprises a polynucleotide sequence of claim 27, the method comprising:

- a) exposing a sample comprising the target polynucleotide to a compound, under conditions suitable for the expression of the target polynucleotide,
 - b) detecting altered expression of the target polynucleotide, and
 - c) comparing the expression of the target polynucleotide in the presence of varying amounts of the compound and in the absence of the compound.
38. A method of assessing toxicity of a test compound, the method comprising:
- a) treating a biological sample containing nucleic acids with the test compound,
 - b) hybridizing the nucleic acids of the treated biological sample with a probe comprising at least 20 contiguous nucleotides of a polynucleotide of claim 32 under conditions whereby a specific hybridization complex is formed between said probe and a target polynucleotide in the biological sample, said target polynucleotide comprising a polynucleotide sequence of a polynucleotide of claim 32 or fragment thereof,
 - c) quantifying the amount of hybridization complex, and
 - d) comparing the amount of hybridization complex in the treated biological sample with the amount of hybridization complex in an untreated biological sample, wherein a difference in the amount of hybridization complex in the treated biological sample is indicative of toxicity of the test compound.
39. (As Once Amended) A microarray wherein at least one element of the microarray is a polynucleotide of claim 43.
40. A method of generating an expression profile of a sample which contains polynucleotides, the method comprising:
- a) labeling the polynucleotides of the sample,
 - b) contacting the elements of the microarray of claim 39 with the labeled polynucleotides of the sample under conditions suitable for the formation of a hybridization complex, and
 - c) quantifying the expression of the polynucleotides in the sample.

41. (As Once Amended) An array comprising different nucleotide molecules affixed in distinct physical locations on a solid substrate, wherein at least one of said nucleotide molecules comprises a first oligonucleotide or polynucleotide sequence completely complementary to 20 contiguous nucleotides of a target polynucleotide, and wherein said target polynucleotide is a polynucleotide of claim 32.

43. An isolated polynucleotide comprising 20 contiguous nucleotides of a polynucleotide of claim 32.

C42 44. (New) An isolated polynucleotide of claim 23 encoding a polypeptide comprising an amino acid sequence at least 95% identical to the amino acid sequence of SEQ ID NO:37 encoded by an allele of SEQ ID NO:74.

45. (New) An isolated polynucleotide of claim 32 selected from the group consisting of:

- a) a polynucleotide comprising a sequence of an allele of SEQ ID NO:74 at least 95% identical to the polynucleotide sequence of SEQ ID NO:74,
 - b) a polynucleotide completely complementary to the polynucleotide of a) over the entire length of the polynucleotide of a).
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